

Abstract

The invention relates to a method and a device for synchronizing one or more remote clocks (2) to a central clock (1) via a bi-directional satellite radio link (9.1, 9.2). Time and data signals are exchanged via suitable transmitting (8, 12) and receiving devices (5, 11) at both ends of the radio link. From time difference measurements (6, 14) at both ends a control signal (17) is derived in such a manner that the clock (2) installed directly in the remote ground station devices (11) synchronizes in state and rate to the central clock (1) with the aid of the two-way method (TWSTFT, Two-Way Satellite Time and Frequency Transfer). The user has access to time signals (18) which directly represent the state of the central clock (1). The signals used for the time measurement are also used for data transmission, resulting in a system operating in real time in which the control deviations (15, 16) of the remote clock are accessible at both ends of the system.